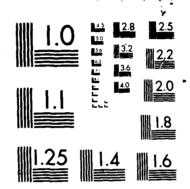
AD-A		CAN EXP	PGROUN	ID RECI	EIPT S	TUDYCL	J) ARM	Y ENGI	IMMARY NEER I	HATERH	87	5 1. NL	./1
	į												
						robbi d iilli	fundi Til if	(100) 100	1160	10 41.	1911		
		1411 1411 1414	Pall Table	22 T									



MICROCOPY RESOLUTION TEST CHART
NATIONAL BURLAU OF STANDARDS 1963-A

- session dispessed beganning accorded and session









NATURAL RESOURCES RESEARCH PROGRAM



TECHNICAL REPORT R-87-1

SUMMARY OF THE 1985 CAMPGROUND RECEIPT STUDY

Larry Lawrence

Environmental Laboratory

DEPARTMENT OF THE ARMY Waterways Experiment Station, Corps of Engineers PO Box 631, Vicksburg, Mississippi 39180-0631



July 1987 Final Report

Approved For Public Release, Distribution Unlimited



US Army Corps of Engineers
Washington, DC 20314-1000

AD-A183214

REPORT I	DOCUMENTATIO	N PAGE			Form Approved OMB No. 0704-0188					
1a REPORT SECURITY CLASSIFICATION		16 RESTRICTIVE	MARKINGS							
Unclassified 2a SECURITY CLASSIFICATION AUTHORITY		3 DISTRIBUTION	A AVAILABILITY O	FREPORT						
26 DECLASSIFICATION DOWNGRADING SCHEDU	ILÉ		d for public unlimited	relea	se; distri-					
4 PERFORMING ORGANIZATION REPORT NUMBE	R(S)	5. MONITORING	ORGANIZATION R	EPORT NU	MBER(S)					
Technical Report R-87-1										
68. NAME OF PERFORMING ORGANIZATION USAEWES	6b. OFFICE SYMBOL (If applicable)	7a NAME OF M	ONITORING ORGAI	NIZATION						
Environmental Laboratory 6c. ADDRESS (City, State, and ZIP Code)	<u> </u>	7b. ADDRESS (City, State, and ZIP Code)								
, , , , , , , , , , , , , , , , , , , ,			, , , , , , , , , , , , , , , , , , ,	,						
PO Box 631 Vicksburg, MS 39180-0631		Í .								
8a NAME OF FUNDING, SPONSORING ORGANIZATION	8b OFFICE SYMBOL (If applicable)	9 PROCUREMEN	T INSTRUMENT IDI	ENTIFICATI	ON NUMBER					
US Army Corps of Engineers										
8c. ADDRESS (City, State, and ZIP Code)		PROGRAM	FUNDING NUMBER	TASK	WORK UNIT					
Washington, DC 20314-1000		ELEMENT NO.	NO.	NO.	ACCESSION NO.					
11 TITLE (Include Security Classification)		·								
Summary of the 1985 Campgrou	ınd Receipt Stud	у								
12. PERSONAL AUTHOR(S)										
Lawrence, Larry					24.65.62.44.7					
13a. TYPE OF REPORT 13b TIME CO Final report FROM	OVERED TO	14. DATE OF REPO		Day) 15	PAGE COUNT					
16. SUPPLEMENTARY NOTATION										
Available from National Tech Springfield, VA 22161.	nnical Informati	on Service,	5285 Port Ro	yal Ro	ad,					
17. COSATI CODES	18 SUBJECT TERMS (Continue on revers	se if necessary and	identify b	y block number)					
FIELD GROUP SUB-GROUP	Campsite facil	ities	>Trends	,						
	Recreation res		Visito	rs, 🞺	ń.					
19 ABSTRACT (Continue on reverse if necessary	Research (L.C.			<u>`</u>	· -					
This report summarizes Study projects. Comparisons well as the following user oprimary destination, vehicle campground facilities are collect through 1985. Finally, of the data analyses to manage	data collected s are made regar characteristics: e type, and camp onsidered, as de conclusions an	in 1985 from ding the num length of ing equipmen termined thr d recommenda	ber and type stay, group t. Current ough the con tions are ma	size, trends	ermits issued as prior visits, in the use of n of data from					
20 DISTRIBUTION / AVAILABILITY OF ABSTRACT	DOT		CURITY CLASSIFICA	ATION						
UNCLASSIFIED/UNLIMITED ☐ SAME AS R 22a NAME OF RESPONSIBLE INDIVIDUAL	RPT DTIC USERS		Include Area Code) 22c OF	FICE SYMBOL					

DD Form 1473, JUN 86

Previous editions are obsolete

SECURITY CLASSIFICATION OF THIS PAGE

PREFACE

This is the sixth report of the Campground Receipt Study (CRS), which was developed under the Natural Resources Research Program to monitor visitor characteristics and to determine trends in visitation use. The CRS was pretested in 1979 but was not formally reported at that time. In subsequent years, the information collected has formed a data base for monitoring visitor use patterns and changes. In this report, the 1985 CRS data are summarized and analyzed, data from 1981 through 1985 are compared, and significant trends are described.

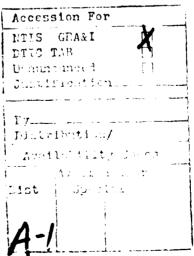
The author of this report was Mr. Larry Lawrence, Environmental Laboratory (EL), US Army Engineer Waterways Experiment Station (WES), Vicksburg, Miss. Mr. Wardell Brumfield ran the computer programs for the data analysis of each project. The study was supervised by Mr. Roger Hamilton, Chief, Resource Analysis Group, and Dr. Conrad J. Kirby, Chief, Environmental Resources Division, EL. Dr. Adolph Anderson (EL) was Manager of the Natural Resources Research Program. Dr. John Harrison was Chief, EL. The report was edited by Ms. Lee T. Byrne of the Information Products Division, Information Technology Laboratory, WES. Messrs. Philip Parsley, DAEN-CWO-R, and Robert Daniel, DAEN-CWP-D, were Technical Monitors.

COL Allen F. Grum, USA, was the previous Director of WES. COL Dwayne G. Lee, CE, is the present Commander and Director. Dr. Robert W. Whalin is Technical Director.

This report should be cited as follows:

Lawrence, L. R. 1987. "Summary of the 1985 Campground Receipt Study," Technical Report R-87-1, US Army Engineer Waterways

Experiment Station, Vicksburg, Miss.





CONTENTS

																															Page
PREFA	CE .		•					•			•	•		•	•	•		•	•		•	•	•		•	•	•	•		•	1
PART	I:	INT	roi	OUC	T	ION		•		•	•	•	•	•	•	•			•		•		•		•	•	•				3
		rpos																													
		ckgı udy																													3 4
PART	II:	DA	ATA	ΑN	IAI	LYS	IS	•		•	•	•		•	•			•		•	•	•	•	•		•		•			5
		85 (85)																													5 11
PART	III	: (CON	CLU	JS:	ION	S	AN	D	RE	CO	MM	ENI	DAT	rI(ONS	3			•	•				•			•		•	15
FIGUR	ES	1-13	3																												
APPEN	DIX	A:				CAM ATI																								•	A1
APPEN	DIX	В:	C	OME	A!	RIS	ON	0	F	19	81.	-19	98	5 (CAN	P(GRO	וטכ	ND	RI	ECI	EII	PT.	S	rui	ΟY	D.	AT/	1		В1

SUMMARY OF THE 1985 CAMPGROUND RECEIPT STUDY

PART I: INTRODUCTION

Purpose

1. The primary focus of this report is to summarize and examine data collected in 1985 regarding use patterns and characteristics of visitors at US Army Corps of Engineers (CE) fee campgrounds. The procedures that are described herein reflect 6 years of developing, testing, and evaluating a program for the longitudinal collection of this type of information. Through an analysis of these data, changes in use patterns (such as recreation preferences, use of camping facilities, recreation equipment, vehicle type) and visitor characteristics (such as senior citizens, duration of stay, place of origin, frequency of visits) can be observed. Knowledge of current trends as indicated by these findings is essential to decisionmakers in their planning and management of recreation resources.

Background

2. The Campground Receipt Study (CRS) was developed as a part of the Natural Resources Research Program (NRRP) to monitor visitation trends in CE lake projects. One of the primary objectives of this study has been the development of a methodology for data collection and analysis; this goal has been successfully met. A second purpose of the CRS is to provide a data base that can be used to determine camping trends. After 6 years of data collection, this second goal is now a reality. For example, data on Golden Age Passport/Access users* indicate significant patterns in the use of camping facilities, type of camping, mode of transportation, recreation activities, and percentage of return visitation. Not only have the numbers of Golden Age

^{*} Engineer Regulation 1130-2-404 authorizes the CE to issue Golden Age Passports to citizens who are 62 years of age or older and Golden Access Passports to citizens who are blind or permanently disabled, in compliance with procedures established by the Secretary of the Interior.

Passport/Access users increased, but they also comprise a large percentage of campers with motorhomes and travel trailers. Another trend that can be discerned indicates preferences by senior citizens for specific recreation sites. Future studies may be directed toward a determination of those factors that attract senior citizens to particular campgrounds.

Study Procedures

- 3. The CRS was first pretested in the summer of 1979 at three CE projects--Lake Ouachita, West Point Lake, and Shenango River Lake. Since then, the number of locations included in the study has increased to 16 sites (the Mississippi River Pool 16 having been added to the program in 1984).
- 4. Data have been collected systematically within each project by means of the ENG Form 4457 with periodic modifications in entries and adjustments in format. A detailed description of these changes can be found in Fritschen (1983).*
- 5. The data collected are then sent to the appropriate District Office for keypunching before being submitted to US Army Engineer Waterways Experiment Station (WES) for analysis. Data analyses are made by means of the Recreation Analysis Program (RAP), a FORTRAN program that generates a summary of the CRS study for each recreation area and campsite. The information obtained provides a data base to determine trends in repeat visitation, changes in recreation patterns, use of camping areas and facilities, as well as other trends discussed in this report.
- 6. Currently, efforts are being made to evaluate the feasibility of collecting data electronically, by means of microcomputers or terminals in the field. The data can then be transferred to a central computer system for analysis; thus expensive and time-consuming keypunch operations can be eliminated.

^{*} J. A., Fritschen. 1985. "Summary of the 1983 Campground Receipt Study," Miscellaneous Paper R-85-2, US Army Engineer Waterways Experiment Station, Vicksburg, Miss.

PART II: DATA ANALYSIS

1985 Campground Receipt Study Data

- 7. The data summarized in the following paragraphs were collected from the 16 projects included in the CRS. These data are reported in terms of the individual CRS projects and the sample as a whole. Data regarding the recreation areas within each project may be found in Appendix A.
- 8. During 1985, 146,087 camping permits were issued in all CRS projects, of which 19.4 percent represented renewals. The highest number of permits issued at any single location was recorded at Somerville with a total of 21,464, and the lowest number was at Mississippi River Pool 16 with a total of 1,873. The number of groups reported as camping at CRS project sites was 117,271. The largest number of groups was at Somerville, while the lowest number was at Mississippi River Pool 16 (see Table 1). Studywide, 21.1 percent of the camping parties used Golden Age or Golden Access Passports (see Table 2).
- 9. The average number of campers in a group was 3.4, ranging from 2.5 at New Hogan to 3.9 at Somerville (Figure 1 and Table 2). A total of 909,159 recreation days* was recorded for all projects. Groups spent an average of 2.4 nights at the project for each visit. The average length of stay ranged from 1.8 days at Milford Lake to a high of 3.4 days at Shenango Lake (Figure 2). Slightly more than one-half of all camping parties indicated that they had made prior visits to the recreation area (Table 2); however, there was a broad range between the highest and lowest numbers who had visited the areas previously. At New Hogan, 87.6 percent of the campers reported that they were making a repeat visit to the projects, while only 31.3 percent of the parties at Lake Ouachita were repeat visitors (Figure 3 and Table 2).
- 10. There was a 6-percent decrease from the previous year in the number of visitors who indicated that the project where they were interviewed was their primary destination. Lake Ouachita was low with 31.7 percent, and New Hogan Lake was high with 97.6 percent (Figure 4 and Table 2).

^{*} A recreation day is defined as a visit by one individual to the project for recreation purposes during all or any reasonable portion of a 24-hr period.

Table 1 1985 Use: Permit Summary

Project	Number of Permits	Number of Groups	Percent Renewal Receipts
Lake Barkley	5,939	4,239	28.6
Lake Benbrook	9,864	7,813	20.8
Greers Ferry Lake	20,210	15,390	23.8
Hartwell Lake	8,455	6,889	18.5
McNary Lake and Dam	3,765	3,014	19.9
Milford Lake	4,408	4,338	1.6
MS Pool 16	1,873	1,658	11.5
New Hogan Lake	10,096	8,575	15.1
Nolin Lake	5,256	4,275	18.7
Lake Oahe	8,086	5,957	26.7
Lake Ouachita	8,621	7,470	13.2
R. S. Kerr Lake and Dam	3,151	2,226	26.4
Lake Shelbyville	18,405	14,155	23.4
Shenango River Lake	7,618	5,102	33.0
Somerville Lake	21,464	19,358	9.8
West Point Lake	8,876	6,812	23.3
Studywide	146,087	117,271	19.7

Table ?

1985 General Use Characteristics

Project	Recreation 	Mean Length of Stay	Mean Number in Group	Percent Prior Visits	Percent Primary Destination	Percent Golden Age/Access Passports
Barkley	38,326	3.15	2.98	55.20	75.98	38.3
Benbrook	54,541	2.19	3.70	56.00	58.11	19.72
Greers Ferry	116,298	2.29	3.39	62.65	67.30	18.42
Hartwell	40,799	2.63	3.24	38.32	56.95	13.85
McNary	14,763	1.83	2.76	43.00	80.40	51.30
Milford	25,434	1.79	3.30	43.98	68.03	15.86
MS Pool 16	10,379	2.38	2.72	63.63	77.08	42.02
New Hogan	49,521	2.33	2.49	87.57	97.55	21.40
Nolin	28,897	1.99	3.43	37.52	42.06	3.96
Lake Oahe	35,919	2.14	2.99	36.28	40.84	33.01
Ouachita	68,434	2.46	3.74	31.31	31.66	14.43
R. S. Kerr	16,695	2.70	3.24	74.17	85.98	26.88
Shelbyville	144,897	3.05	3.70	70.08	92.47	17.51
Shenango	66,192	3.41	3.71	48.02	60.21	49.3
Somerville	135,633	2.00	3.90	58.00	61.23	16.95
West Point	62,431	2.95	3.26	79.24	83.19	36.19
Studywide	909,159	2.43	3.41	57.6	67.6	21.1

- 11. Another user characteristic that has been noted in the CRS includes the vehicle distribution by type within camping groups. Cars and trucks provided the highest percentages of vehicles used by camping parties on a studywide basis. The highest percentage of visitors with cars (59.3 percent) were at Shenango Lake, while Lake Oahe had the lowest percentage (22.1) (Figure 5 and Table 3). Approximately 46.7 percent of the groups visiting the CRS projects had at least one truck; the project with the lowest percentage of groups with trucks was Nolin Lake with 29.1 percent, whereas R. S. Kerr Lake had 70.8 percent (Figure 6 and Table 3). Only 13.9 percent of vehicle distribution by group was in the form of motorhomes (Figure 7 and Table 3), and an even lower percentage (11.3 percent) was composed of vans (Table 3). Other methods of transportation, such as motorcycles, bicycles, or walking, explained the remaining 1.5 percent. The percentages reported at the various projects remained fairly consistent with the nationwide findings, with the most noticeable variation occurring at Lake Oahe, where 31.0 percent of the groups had motorhomes and at Benbrook Lake where 13.3 percent of the groups had vans (Figures 7 and 8 and Table 3).
- 12. The distribution of camping equipment and powerboats within the 16 CRS projects and for the entire sample is shown in Table 4. The majority of the campers still preferred tents, but travel trailers were the second largest method of camping. Overall, 40.3 percent of the camping groups used tents, and 21.3 percent used travel trailers. Another 10.1 percent camped in pop-up trailers, 9.2 percent used pickup campers, and 9.6 percent reported that they used no camping equipment. Lake Ouachita had the largest number of campers who used tents (62.8 percent), and Mississippi Pool 16 had the lowest figures with 13.7 percent (Figure 9 and Table 4). The studywide average for groups bringing powerboats was 30.5 percent. Noteworthy lows were observed at McNary, where only 3.9 percent of the camping groups indicated that they had powerboats.
- 13. The distribution of campers using pop-up trailers is shown in Figure 10 and Table 4. Although there is not much deviation at individual projects, there are substantial differences among projects, with a low at New Hogan Lake of 1.4 percent and a high at Hartwell Lake with 62.3 percent. Differences among campers using pickup trucks included Nolin Lake, which had the highest percent with 21.3, while Somerville Lake had only 5.2 percent (Figure 11). Nolin Lake reported the fewest travel trailers with 5.6 percent,

Table 3

1985 Distribution of Vehicle Types

Percent of Camping Groups

Project	Car	Truck	Van	Motorhome	Other
Barkley	36.57	54.70	10.11	17.75	0.45
Benbrook	44.59	51.44	13.27	12.09	0.43
Greers Ferry	36.85	51.10	8.73	9.63	1.30
Hartwell	58.31	44.65	8.78	9.62	0.89
McNary	24.10	35.68	11.78	34.16	0.27
Milford	38.27	50.50	11.23	17.39	0.88
MS Pool 16	26.59	43.05	11.40	29.02	0.0
New Hogan	32.68	37.38	10.28	10.27	8.80
Nolin	47.60	29.14	16.78	14.07	0.73
0ahe	22.07	46.07	10.59	31.00	1.01
Ouachita	43.21	52.07	11.83	8.19	1.06
Kerr	24.61	70.75	6.14	13.60	0.91
Shelbyville	44.24	37.27	14.65	14.39	0.63
Shenango	59.30	36.52	10.83	14.57	0.24
Somerville	38.25	52.86	11.02	8.18	1.98
West Point	37.63	48.01	12.85	24.86	0.43
Studywide	39.6	46.7	11.3	13.9	1.5

Table 4

1985 Distribution of Camping Equipment and Powerboat

Percent of Camping Groups

Project	Tent	Pop-up Trailer	Pickup Camper	Travel Trailer	No Camping Equipment	Power- boat
Barkley	26.3	10.7	12.8	30.2	4.1	43.6
Benbrook	31.1	4.7	7.4	20.9	27.5	17.8
Greers Ferry	52.8	9.7	5.4	19.7	5.9	17.8
Hartwell	39.4	62.3	6.5	28.3	0.0	00.0*
McNary	19.8	4.1	12.4	32.0	0.6	3.9
Milford	37.2	7.0	8.4	29.8	2.2	38.6
MS Pool 16	13.7	6.5	6.9	45.7	0.1	11.0
New Hogan	30.7	1.4	11.6	9.4	37.6	21.3
Nolin	58.1	5.6	21.3	5.6	1.8	43.3
Oahe	21.0	7.4	20.0	20.9	2.3	42.9
Ouachita	62.8	12.6	6.1	16.92	0.3	40.8
R. S. Kerr	28.4	3.4	15.4	42.0	0.5	40.4
Shelbyville	42.5	12.1	9.8	19.9	5.3	40.6
Shenango	34.4	12.9	8.9	26.9	3.5	29.3
Somerville	45.3	6.6	5.2	20.0	17.1	34.8
West Point	33.1	7.4	11.4	24.9	0.1	52.9
Studywide	40.3	10.1	9.2	21.3	9.6	30.5

^{*} Hartwell explained that this figure was a keypunching error and that it was not feasible for the contractor to duplicate these keypunching requirements.

and Mississippi River Pool 16 had the most with 45.7 percent (Figure 12). The studywide average was 21.3 percent. Benbrook, Somerville, and New Hogan noted high percentages of visitors with no camping equipment, which the projects indicated was a result of day use visitors paying the campsite use fee and using it to picnic.

1985 Trend Analysis

- 14. The second and perhaps the most significant purpose for the CRS was to develop a data base for the observation and evaluation of camping trends. After 5 years of data collection (from 1981 through 1985), patterns of camping use are discernible. These data are beneficial to management in making decisions about current operations as well as the future needs of recreation areas.
- 15. Most of the projects included in the study have remained fairly consistent in the issuance of permits from 1981 through 1985 (Table 4). For example, at Milford Lake, the variation from year to year has been no more than 500 permits totally. The largest increase was observed at Somerville Lake, which reported only 10,436 permits in 1981 but 21,464 in 1985 (Table 5); this increase can be explained by the tremendous growth of nearby Houston and Bryam/College Station and the conversion of a free area to a fee campground.
- 16. The average number of people in a camping group has declined since 1981. The mean number of campers in a party was 3.6 in 1981 and 3.4 in 1985, a difference of 0.2 persons. The same is true for the overall average (2.4 nights) for the number of nights spent at the recreation area. Table 6 shows the group size and length of stay for the entire CRS in the years involved. The report on the individual areas for 1985 may be found in Appendix A.
- 17. Noticeable differences were observed in use characteristics for the CRS sample as a whole from 1981 through 1985. There was an overall decline in the number of camping groups that had made previous visits to the project. Eighty percent of the groups reported prior visitation in 1981, but only 57.6 percent were repeaters in 1985 (Table B1). A similar decline (from 89.6 percent to 67.6 percent) was noted in those who indicated the project as their primary destination. These results may have important management implications (e.g., increased need for project information), but reasons for

Table 5
Number of Permits, 1981-1985

Project	1981	1982	1983	1984	1985
Barkley	7,416	7,937	6,540	7,404	5,939
Benbrook	3,463	5,472	7,511	5,819	9,864
Greers Ferry	25,272	32,054	28,503	29,826	20,210
Hartwell	8,050	10,714	10,741	8,829	8,455
McNary	4,237	4,729	3,318	3,335	3,765
Milford	4,207	4,856	4,062	4,361	4,408
New Hogan	4,410	7,456	7,090	3,426	10,096
Nolin	4,724	3,243	2,414	5,147	5,256
Oahe	7,816	7,493	8,672	8,228	8,086
Ouachita	5,805	9,259	8,878	8,946	8,621
MS Pool 16*	~-			1,317	1,873
Kerr	2,885	2,603	2,115	2,246	3,151
Shelbyville	18,974	20,496	18,206	10,437	18,405
Shenango	5,231	7,241	6,974	7,359	7,618
Somerville	10,436	16,874	18,765	18,531	21,464
West Point	7,278	9,149	11,146	11,542	8,876
Totals	120,204	149,576	144,935	136,753	146,087

^{*} Mississippi River Pool 16 was added to the program in 1984; therefore, data for this project were not available for 1981, 1982, and 1983.

Table 6

Mean Group Size and Length of Stay for Entire CRS

1981-1985

Factor	1981	1982	1983	1984	1985
Mean number of people per group	3.60	3.58	3.62	3.40	3.41
Mean length of stay, nights	2.05	2.58	2.58	2.38	2.43

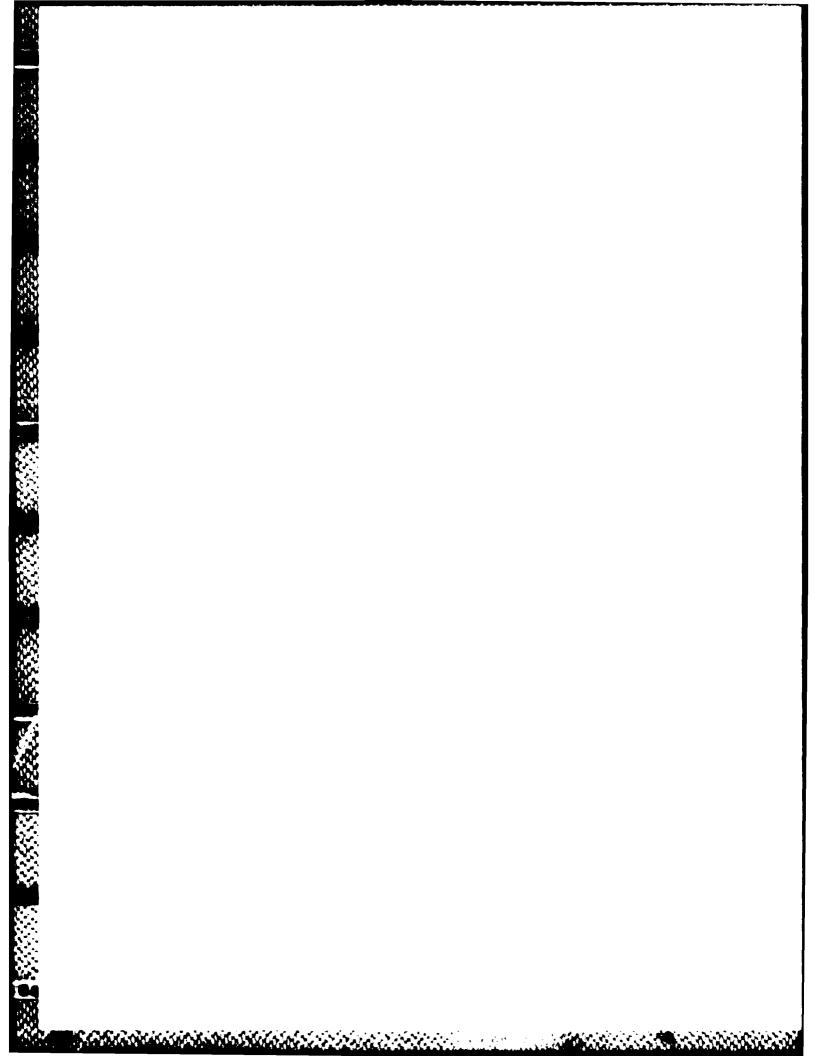
the decline are not explained by the data. However, the number of Golden Age or Access Passports increased from 16.7 percent in 1981 to 21.1 percent in 1985.

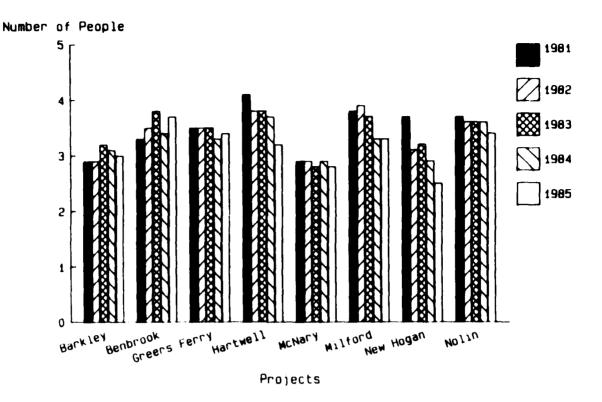
- 18. For all 5 years of the study, trucks have been the favored mode of transportation by camping visitors. In fact, the number of parties using trucks has increased from 40.6 percent in 1981 to 46.7 percent in 1985 (Table B2). The use of cars increased from 37.2 percent to 39.6 percent, whereas motorhome use remained fairly stable, rising only slightly from 12.7 percent in 1981 to 13.9 percent in 1985. Van usage, with a small increase from 9.5 percent (1981) to 11.3 (1985), had an average annual increase of 4.4 percent, over three times greater than the average annual increase for cars (1.6 percent). These increases in the distribution of vehicles were proportional to the additional number of camping parties visiting CRS recreation areas. The figures for the studywide apportionment of vehicles by type are presented in Table B2. Percentages for the individual projects may be found in Figures 5 through 8.
- 19. The CRS data supported noticeable preferences by senior citizens, not only in the selection of campground locations but also in their predominant use of trucks and motorhomes over other types of vehicles. Other trends involving camping equipment preferred by Golden Age or Access visitors may also be noted. For example, these campers comprised a noticeable percentage of those who preferred trailers to other types of camping facilities. The majority of Golden Age/Access Passport users favored trailers in both 1984 and 1985. Of the 21.5 percent who used this method of camping in 1984, 48.3 percent were senior citizens. The inverse was observed of those who preferred tents. Studywide, the majority of CRS camping parties used tents (41.1 percent in 1984 and 40.3 percent in 1985).

20. The 1985 data indicated that powerboats were still preferred over other types of recreation equipment. The percent of camping groups reporting the use of powerboats ranged from 30.4 percent in 1981 to 30.5 percent in 1985. See Table B3 for the distribution of camping equipment and powerboats from 1981 through 1985 for the entire sample. Percentages for individual projects may be found in Figure 13. Appendix B contains a comparison of the CRS data obtained in 1981 through 1985.

PART III: CONCLUSIONS AND RECOMMENDATIONS

- 21. Initially the CRS originated for two purposes: first to develop a methodology for the collection of data regarding visitor use characteristics and second to formulate a data base that would provide for trend predictions. The study has been generally successful in achieving both goals. The set of procedures used in the CRS has, for the most part, been efficient and effective, with a minimum of burden on project personnel and visitors.
- 22. The data base obtained through the CRS provides recreation planners and managers with the type of information needed for making decisions about current and future use of recreation areas. Through the observation and evaluation of visitor characteristics, decisionmakers are able to determine the needs of campers at recreation sites and to plan changes in facilities accordingly. For example, CRS data have been used in several districts to evaluate usage of electric hookups. Trend predictions have helped some districts in developing long-range staffing and scheduling plans, especially during peak recreation seasons. The US Army Engineer District, Little Rock, has used CRS data in the preparation of marketing information, and the staff at Lake Oahe have analyzed zip code data to determine trends related to visitor's county of origin. At Lake Shelbyville, the data were used in the preparation of visitor information brochures.
- 23. Other applications of CRS data can be made by management, who may find this type of information useful in a number of ways. For example, it may be helpful to investigate the effects that increases in fees will have on visitation at recreation sites. Through the monitoring of visitor characteristics, preferences for campsites and recreation resources can be detected. Based on these observations, decisions can be made about scheduling personnel, modifying existing facilities, or even locating additional facilities. The use of CRS data has been somewhat limited at the present, but more applications of the data will be made in the future as the findings of the CRS become more accessible because of improved technology. The volume of information collected through the CRS has been a limiting factor in the past, but computer storage and analysis have provided less costly and time-consuming methods of handling the data.





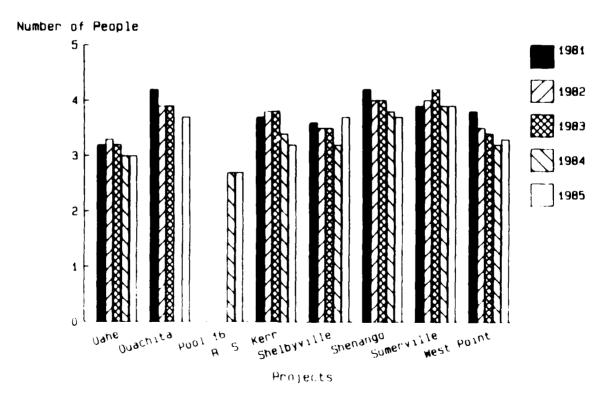
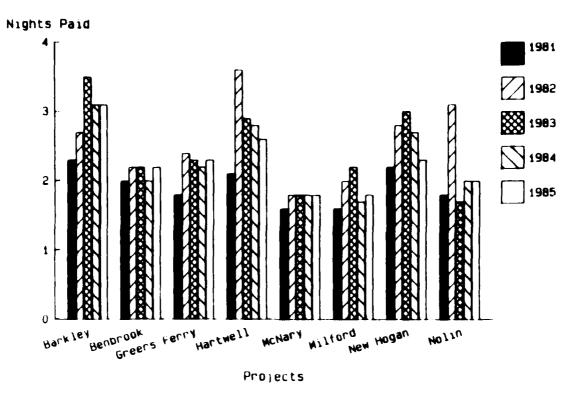
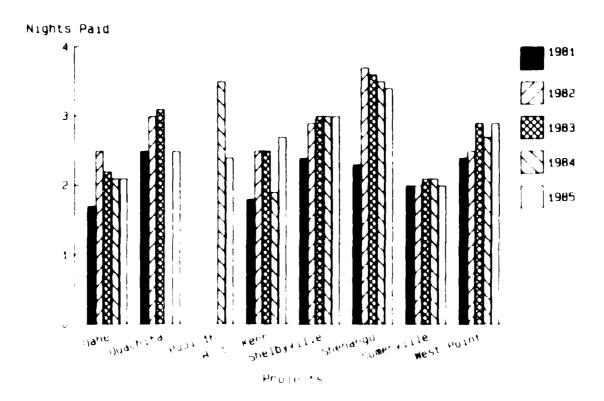
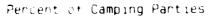


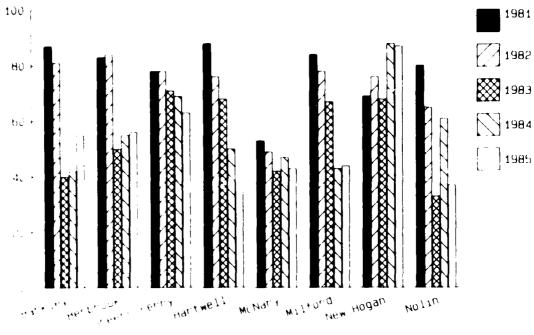
Figure 1. Average number in group, 1987 a 198





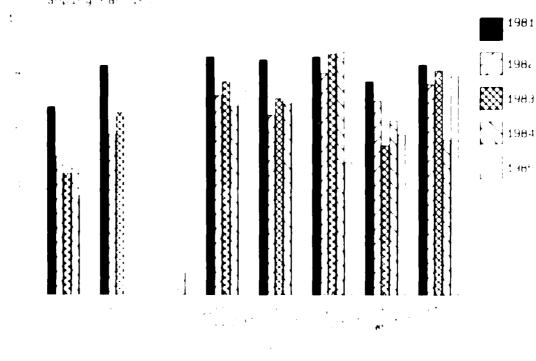
brature of Sperage sergth of Stell 1985 of the



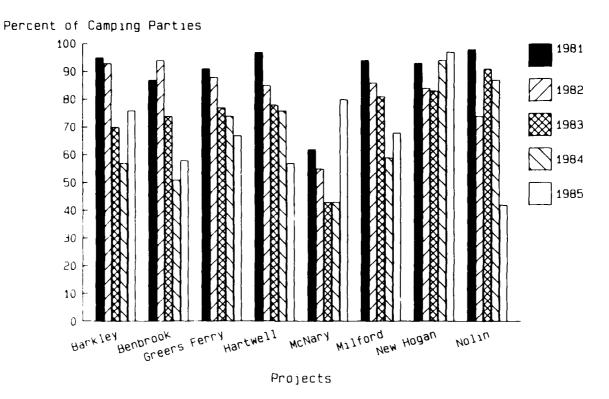


Projects

The profit of ampling ranting.



rigure ... Percent of Company groups with prior to the to proceed, 1981-1987



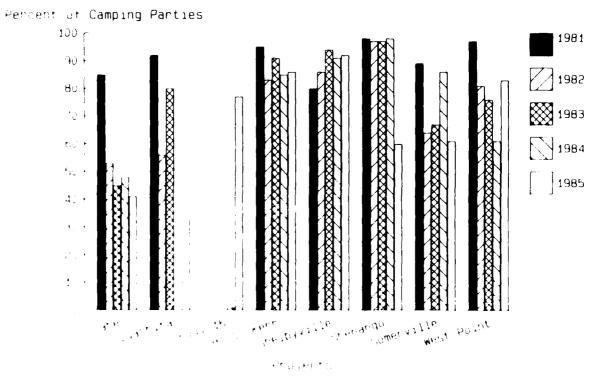
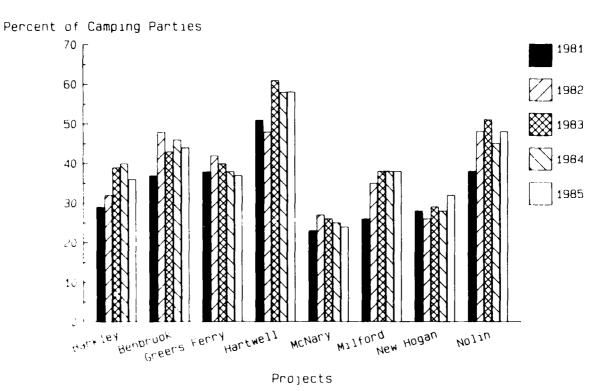


Figure 4. Percent of camping groups with the project as primary destination, 1981-1985

British PRO



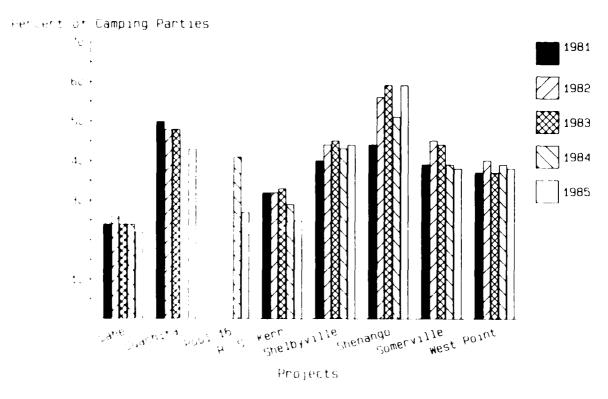
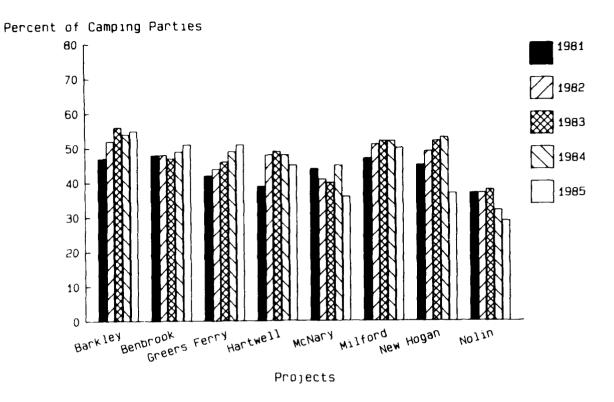


Figure 5. Percent of camping groups with cars, 1981-1985



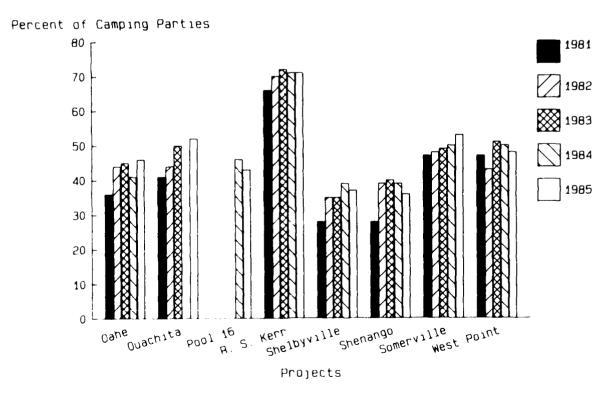
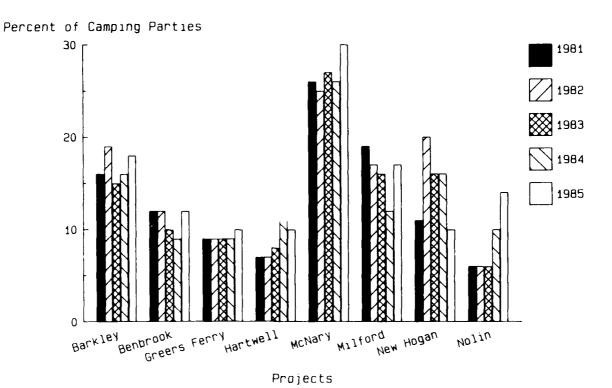


Figure 6. Percent of camping groups with trucks, 1981-1985



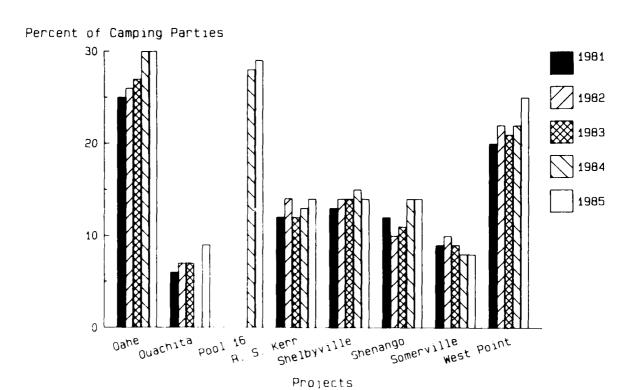
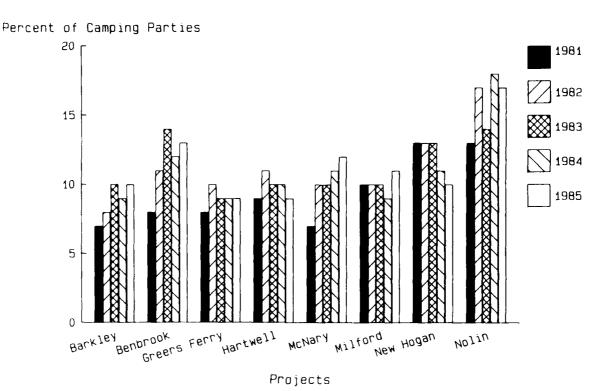


Figure 7. Percent of camping groups with motorhomes, 1981-1985



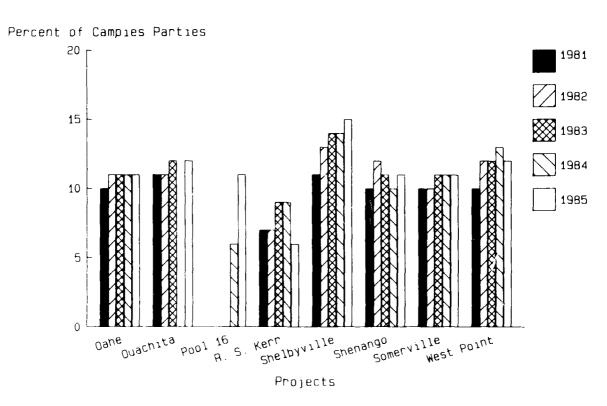
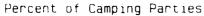
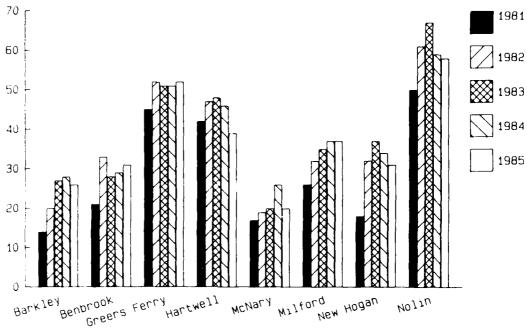
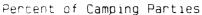


Figure 8. Percent of camping groups with vans, 1981-1985





Projects



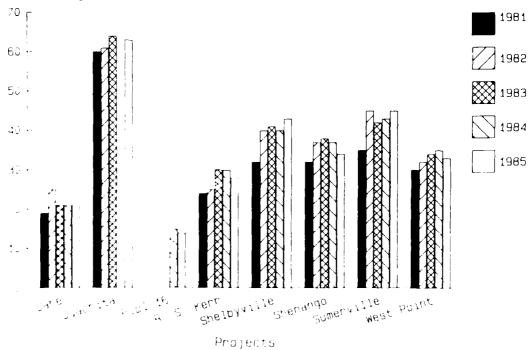
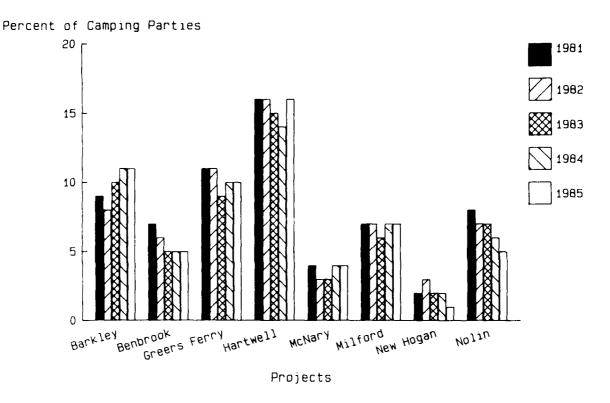


Figure 9. Percent of camping groups using tents, 1981-1985



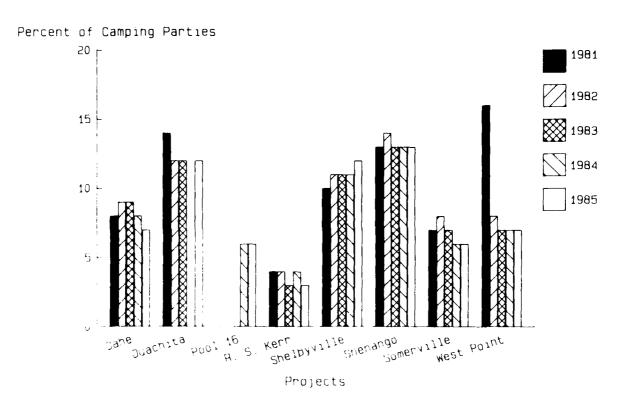
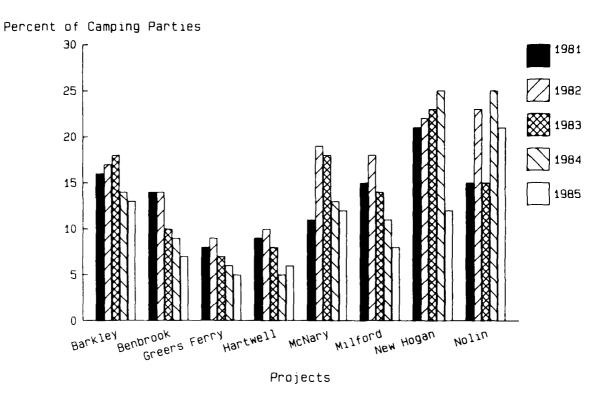


Figure 10. Percent of camping groups with pop-up trailers, 1981-1985



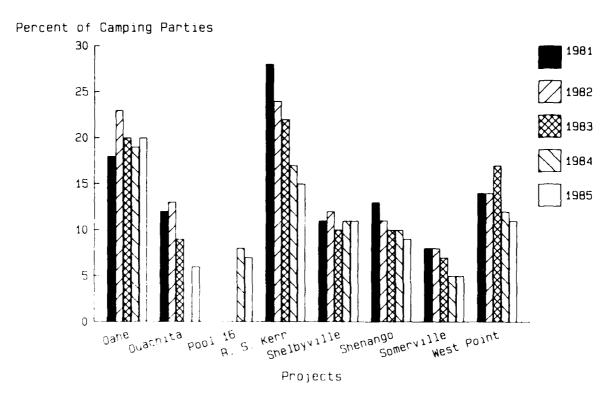
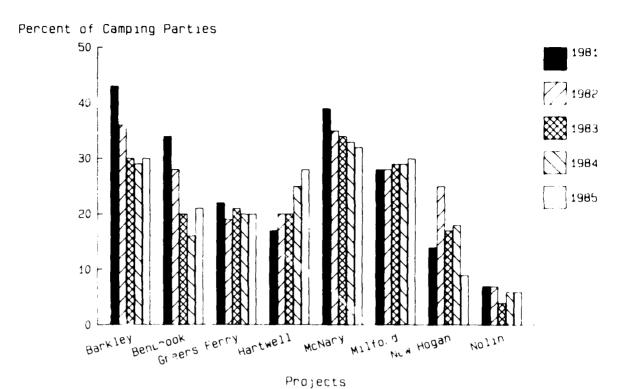


Figure 11. Percent of camping groups with pickup campers, 1981-1985



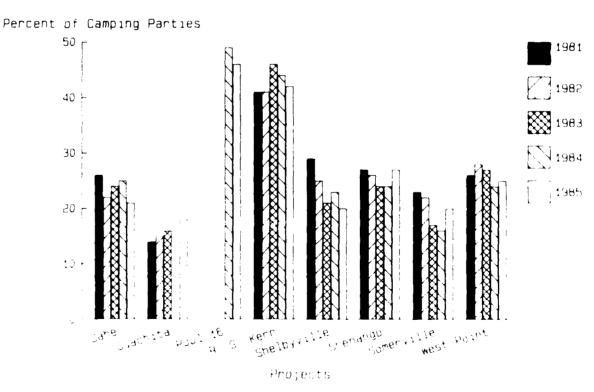
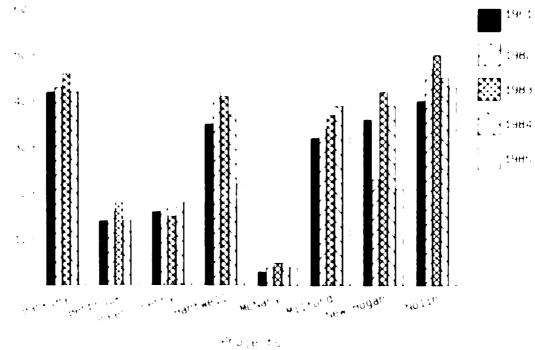


Figure 12. Percent of camping groups with travel trailers, 1981-1985



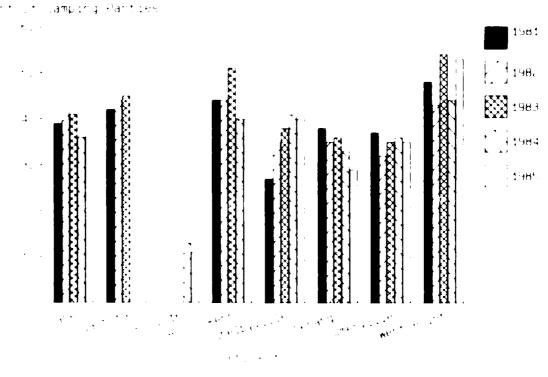


Figure 13. Camping groups with powerboats. 1981~1985

APPENDIX A: 1985 CAMPGROUND RECEIPT STUDY DATA SUMMARIES FOR INDIVIDUAL RECREATION AREAS

Table Al

Lake Barkley User Characteristics

Characteristic	Eureka	Canal	Hurricane Creek	Devils Elbow	Bumpus Mills	Totals
Recreation days	3,820	18,419	11,131	2,400	2,556	38,326
Mean length of						
stav, nights	2.64	3.57	3.44	2.30	1.83	3.15
Mean number in	2.98	2.84	3.01	3.35	2 20	2.98
group	70	04	3.01	3.37	3.20	2.90
Percent prior						
visits	4.20	64.90	75.70	73.70	9.30	55.20
Percent primary						
destination	82.80	67.30	85.40	81.10	77.80	75,98
Percent Golden						
Passports	43.40	64.60	65.50	16.00	16.20	38.26
Number of camping						
permits	718	2,584	1,706	423	508	5,939
Number of camping						
groups	505	1,871	1,101	312	450	4,239

Table A. Lake Barkley Vehicle and Equipment Type
Percent of Camping Parties

Vehicle and Equipment Type	Fureka	Canal	Hurricane Creek	Devils Elbow	Bumpus Mills	T 1
	: ureka	- alla i	1 LEEK	r. r. bow	71115	Totals
Vehicle						
Car	32.5	38.0	24.6	44.	46.8	16.5
Truck	n 7.1	55	58.5	51.3	42.8	54.10
Van	10.1	4.5	10.5	15.	8.3	10.11
Motorhome	h."	14.2	11.9	6.4	10.8	, , , , ,
Other	0.0	().()	1.1	1.0	(),4	0.45
Camping equipment						
Tent	44.1	13.6	26.3	52.4	41.	26.33
Pop-up trailer	11.2	9.4	6?	6.1	27.4	10.54
Pickup camper	18.1	8.5	18.0	16.	8.6	12. **
Travel trailer	25.0	42.5	26.8	8.9	. 5	30.20
No camping equipment	1.4	2.()	6.1	12.3	5.0	4.06
Recreational equipment						
Powerhoat	32.	34.8	62.0	64.	33.1	43.64
Sailboat	0.4	0.1	0.0	0.3	0.0	0.12
Other boat	0.0	0.0	0.7	0.3	0.7	0.28
Biovole	2.0	0.6	5.4	1.0	0.2	2.01
Motoravale	0.4	1.0	0.4	0.3	0.0	0.59
Off-road vehicle	0.0	0.2	0.0	0.0	0.0	0.09
Other	0.0	0.0	().3	0.3	0.0	0.09

Table A3
Benbrook Take User Characteristics

Characteristic	Holiday	Mustang	Totals
Recreation days	28,603	25,938	54,541
Mean 'ength of stay, nights	2.54	1.83	2.19
Mean number in group	3.33	4.07	3,70
Percent prior visits	54.90	57.10	56,00
Percent primary destination	48.90	67.40	58.11
Percent wolden Passports	36.60	13.10	19.72
Number of camping permits	5,248	4,616	9,864
Number of camping groups	3,936	3,877	7,813

Table A4

Benbrook Lake Vehicle and Equipment Type

Percent of Camping Parties

Vehicle and Equipment			
Type	Holiday	Mustang	Totals
Vehicle			
Car	43.7	45.5	44.59
Truck	50.1	52.8	51.44
Van	13.6	13.0	13.27
Motorhome	13.3	10.8	12.09
Other	0.4	0.5	0.43
Camping equipment			
Tent	25.8	36.5	31.14
Pop-up trailer	4.5	5.0	4.75
Pickup camper	7.8	6.9	7.37
Travel trailer	27.8	14.0	20.95
No camping equipment	24.5	30.6	27.58
Recreational equipment			
Powerboat	1.	21.9	17.80
Sailboat	0	1.0	0.88
Other boat	0.2	2.1	1.13
Bicycle	2.5	2.1	2.32
Motorcycle	0.1	1.2	1.13
Off-road vehicle (ORV)	0.1	0.2	0.17
Other	0.2	0.8	0.49

Table A5 Greers Ferry Lake User Characteristics

PRINCES AND ADDRESS OF THE PROPERTY OF THE PRO

Superior Constraint Design

	Dam	014	Heber	Cove			Devils	Sugar	Van		John F.	
Characteristic	Site	Highway 25	Springs	Creek	Shiloh	Narrows	Fork	Loaf	Buren	Choctaw	Kennedy	Totals
Recreation days	33,426	13,853	8,854	2,734	999,9	8,515	9,856	7,675	706	11,004	13,009	116,298
mean length of stay, nights	1.91	2.31	2.03	1.98	2.22	2.83	2.36	2.29	1.76	2.53	3.14	2.29
,												
Mean number in group	3.57	3.67	3.35	3.68	3.42	3.11	3.57	3.49	3.25	3.22	2.65	3.39
Percent prior visits	25.20	82.50	91.80	79.80	09.46	67.40	82.10	79.70	36.60	94.60	84.60	62.66
Percent primary destination	26.00	98.20	92.90	83.00	96.00	74.60	87.30	95.90	26.80	74.40	82.50	67.30
Percent Golden Passports	13.50	11.00	8.60	12.50	16.20	33.80	20.10	16.20	9.80	40.60	77.10	18.42
Number of camping permits	6,057	2,145	1,629	471	1,116	1,409	1,696	1,224	145	1,840	2,478	20,210
Number of camping groups	4,914	1,619	1,278	376	866	1,000	1,195	985	123	1,378	1,656	15,390

Table A6
Greers Ferry Vehicle and Equipment Type
Percent of Camping Parties

COURSE SOURCE SOURCE SOURCE SOURCE

Vehicle and Equipment	Dam	014	Hohor	0,00			0.1410	3000	100			
Type	Site	Highway 25	Springs	Creek	Shiloh	Narrows	Fork	Loaf	Buren	Choctaw	Kennedy	Totals
Car	45.4	42.6	42.6	38.9	32.7	29.0	29.4	34.5	39.8	28.0	21.1	36.85
Truck	43.9	53.2	47.9	57.3	57.2	55.6	59.5	55.8	35.8	56.4	53.7	51.10
Van	8.7	7.9	8.2	12.5	8.0	11.4	9.2	8.5	13.0	0.6	7.0	27.8
Motorhome	6.4	3.3	7.4	1.1	6.3	15.2	9.2	11.6	15.4	16.2	2	2.0
Other	1.5	1.4	0.3	0.0	0.7	0.5	3.3	1.0	0.8	0.1	2.4	1.30
Camping equipment												
Tent	62.1	6.09	64.5	9.49	51.1	36.0	53.9	5.5.0	5.7.9	37 7	0 %	60 63
Pop-up trailer	8.3	8.6	12.1	8	6	, «	11.5	2 -	,,,	1, 0	77.0	00.76
Pickup camper	7.7	7.7		, o	7.5	. 4	7.3	7 2	7 0	7.7	12.0	00.7
Travel trailer	13.5	18.2	13.0	7.7	23.1	27 1	16.0	ָּהָ הַס		37.6	7.7	70.07
No camping equipment	7.6	, v	-		7 2	101		7		7.7	0.00	20.61
	•) • •	:		•	1.01	;	.	13.2	7.	3.4	78.0
Recreational equipment												
Powerboat	6.1	24.3	26.1	33.8	15.9	28.4	42.1	27.8	28	5 76	,	17 75
Sailboat	0.0	0.2	2.2	0.5	1.3	0.5	0,3	0.7	0			25.0
Other boat	0.3	0.1	C	-	-	0				•		2.0
Bicycle	0.7	1.2	1.3		7.0				° «		1.0	0.23
Motorcycle	0.7	1.0	0.1	0.0	0.1	6.0	8-0	0		-	, ,	0.50
Off-road vehicle (ORV)	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.04
Other	0.1	0.1	0.3	0.5	0.0	0.1	1.2	9.0	0.0	0.0	0.1	0.23

Table A7
Hartwell Lake User Characteristics

Characteristic	Matsadlers Georgia Cre	River	Crescent	Springfield	Transtent Group	Glen Ferry Park	Milltown	Chandlers Ferry	Paynes Creek	As- bury	Oconee	Twin	Conerass	Totals
Recreation days	8,818	901	4	2,262	324	86	2,983	0	2,598	1,088	2,982	14,254	5,283	661,04
Mean length of stay, nights	2.93	1.26	1.33	2.24	1.87	1,33	2.28	1.00	2.03	1.87	2.48	2.90	2.59	2.63
Mean number in group	2.89	3,35	2.00	4.20	13.85	4.50	3.55	00.00	3.33	3.08	3.41	3.17	3.08	5.24
Percent pilon visits	43.10	43.50	00.00	61.70	87.50	00.0	68.20	0.00	54.80	29.80	33.10	33.70	13.90	38.32
Percent primary destination	54.20	90.09	00.00	68.20	87.50	00.00	59.30	100.00	64.10	10.00	64.30	61.80	52.40	56.95
Percent Golden Passports	1	;	;	ł	ł	;	1	1	ł	!	{	1	;	}
Number of camping permits	1,934	27	3	522	16	18	592	8	609	338	979	2,560	1,188	8,455
Number of camping groups	1,442	23	9	177	91	18	487	2	515	309	504	2,080	1,043	6,889

Table A8
Hartwell Lake Vehicle and Equipment Type
Percent of Camping Parties

Vehicle and Equipment		River			Transient	Glen Ferry		Chandlers	Paynes	A8-	Oconee	Twin	Conerass	
Туре	Watsadlers	Georgia	Crescent	Springfield	Group	Park	Milltown	Ferry	Creek	bury	Point	Lakes	Park	Totals
Vehicle														
Car	7.65	6.09	_	72.2	80.0		58.6	0.0	58.7	68.3	65.4	5.95	8.65	58.31
Iruck	50.7	47.8	_	34.3	9.09		55.1	0.0	41.6	35.5	35.1	44.7	6.44	44.65
Van	10.5	13.0	00.00	8.8	0.0	0.0	6.2	0.0	10.7	6.5	9.7	6.6	5.0	8.78
Motorhome	17.6	0.0		1.3	20.0		5.1	0.0	8.6	1.7	2.2	12.5	7.7	9.62
Other	0.3	8.7		0.0	0.0		0.7	0.0	0.0	1.0	2.2	1.5	0.8	0.89
Camping wantament														
Tent	14.6		00.0	86.7	100.0	85.7	78.9	0.0	47.1	77.8	78.6	34.5	27.7	39.39
Pop-up trailer	86.5	0.0	00.00	0.0	0.0	0.0	0.0	0.0	92.7	0.0	0.0	65.3	87.3	62.25
Pickup camper	4.5		100.00	5.1	16.7	0.0	5.2	0.0	7.3	8.5	13.9	7.0	4.7	97.9
Travel trailer	7.77		00.00	6.3	33,3	14.3	9.2	0.0	16.0	11.8	6.3	31.8	29.4	28.27
No camping equipment	0.0		00.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
Recreational equipment														
Powerboat	0.0		0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sailboar	14.1		0.00	24.2	37.5	44.4	0.04	0.0	35.7	25.9	27.0	20.3	18.5	22.31
Other boat	6.5		00.00	7.6	0.0	0.0	4.3	0.0	4.3	1.9	3.8	0.8	1.3	3.31
Bicycle	0.0	0.0	00.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Motorcycle	0.0		00.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Off-road vehicle	0.0		0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
(ORV)														
Other	0.0	0.0	00.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00

Table A9

McNary Lake User Characteristics

Characteristic	Hood Park	Totals
Recreation days	14,763	14,763
Mean length of stay, nights	1.83	1.83
Mean number in group	2.76	2.76
Percent prior visits	43.00	43.00
Percent primary destination	80.40	80.40
Percent Golden Passports	51.30	51.30
Number of camping permits	3,765	3,765
Number of camping groups	3,014	3,014

Table A10

McNary Lake Vehicle and Equipment Type

Percent of Camping Parties

Vehicle and Equipment Type	Hood Park	Totals
Vehicle		
Car	24.1	24.1
Truck	35.7	35.7
Van	11.8	11.8
Motorhome	34.2	34.2
Other	0.3	0.3
Camping equipment		
Tent	19.8	19.8
Pop-up trailer	4.I	4.1
Pickup camper	12.4	12.4
Travel trailer	32.0	32.0
No camping equipment	0.6	0.6
Recreational equipment		
Powerboat	3.9	3.9
Sailboat	0.1	0.1
Other boat	0.2	0.2
Bicycle	0.7	0.7
Motorcycle	0.5	0.5
Off-road vehicle (ORV)	0.1	0.1
Other	0.1	0.1

Table All

Milford Lake User Characteristics

Characteristic	Curtis Creek	Farnum Creek	Rolling Hills	School Creek	Timber Creek	Totals
Recreation days	7,604	2,906	8,520	1,680	4,724	25,434
Mean length of stay, nights	2.10	1.71	1.88	1.58	1.45	1.79
Mean number in group	3.50	3.11	3.19	3.43	3.31	3.30
Percent prior visits	12.90	5.20	65.40	16.50	76.10	43.98
Percent primary destination	15.70	98.00	95.60	18.10	82.40	68.03
Percent Golden Passports	19.20	10.80	21.50	8.10	10.60	15.86
Number of camping permits	1,090	557	1,448	329	984	4,408
Number of camping groups	1,039	553	1,441	321	984	4,338

Table Al2

Milford Lake Vehicle and Equipment Type

Percent of Camping Parties

Vehicle and Equipment Type	Curtis Creek	Farnum Creek	Rolling Hills	School Creek	Timber Creek	Totals
Vehicle						
Car	42.7	41.8	39.7	21.8	35.2	38.27
Truck	52.9	51.4	43.6	52.6	56.5	50.50
Van	11.4	10.0	11.8	15.9	9.4	11.23
Motorhome	16.9	13.9	25.3	20.6	7.6	17.39
Other	2.5	0.0	0.1	0.0	1.0	0.88
Camping equipment						
Tent	34.5	45.6	29.9	41.3	44.7	37.23
Pop-up trailer	7.6	6.3	6.4	5.1	8.0	6.99
Pickup camper	7.2	13.5	6.6	11.6	8.3	8.35
Travel trailer	31.2	22.7	32.1	22.9	30.9	29.79
No camping equipment	5.6	0.2	0.2	1.0	2.9	2.23
Recreational equipment						
Powerboat	48.6	44.1	34.1	41.7	30.7	38.64
Sailboat	1.3	0.4	1.4	0.3	0.4	0.92
Other boat	3.6	0.2	0.7	0.6	1.2	1.43
Bicycle	1.1	0.0	0.5	0.6	0.7	0.62
Motorcycle	3.1	0.4	0.9	2.5	2.0	1.73
Off-road vehicle (ORV)	0.4	0.0	0.1	0.3	0.0	0.14
Other	25.7	0.5	0.0	1.2	2.1	6.80

Table Al3
New Hogan Lake User Characteristics

Characteristic	Acorn Camp	Totals
Recreation days	49,521	49,521
Mean length of stay, nights	2.33	2.33
Mean number in group	2.49	2.49
Percent prior visits	87.60	87.60
Percent primary destination	97.60	97.60
Percent Golden Passports	21.40	21.40
Number of camping permits	10,096	10,096
Number of camping groups	8,575	8,575

Table A14

New Hogan Lake Vehicle and Equipment Type

Percent of Camping Parties

Vehicle and Equipment		· · · · · · · · · · · · · · · · · · ·
Туре	Acorn Camp	Totals
Vehicle		
Car	32.7	32.7
Truck	37.4	37.4
Van	10.3	10.3
Motorhome	10.3	10.3
Other	8.8	8.8
Camping equipment		
Tent	30.7	30.7
Pop-up trailer	1.4	1.4
Pickup camper	11.6	11.6
Travel trailer	9.4	9.4
No camping equipment	37.6	37.6
Recreational equipment		
Powerboat	21.3	21.3
Sailboat	0.3	0.3
Other boat	0.6	0.6
Bicycle	0.2	0.2
Motorcycle	0.1	0.1
Off-road vehicle (ORV)	0.0	0.0
Other	0.1	0.1

Table Al5
Nolin Lake User Characteristics

Characteristic	Dog Creek	Wax	Moutardier	Totals
Recreation days	5,897	6,940	16,060	28,897
Mean length of				
stay, nights	1.76	1.97	2.08	1.99
Mean number in				
group	3.69	3.20	3.48	3.43
Percent prior				
visits	80.40	57.70	10.60	37.52
Percent primary				
destination	79.40	97.10	0.10	42.06
Percent Golden				
Passports	0.00	10.70	3.90	3.96
Number of camping				
permits	1,057	1,467	2,732	5,256
Number of camping				
groups	898	1,114	2,263	4,275

SOCIAL BESTORES AND THE SOCIAL PROPERTY AND THE AND THE SOCIAL SO

Table Al6

Nolin Lake Vehicle and Equipment Type

Percent of Camping Parties

Vehicle and Equipment				
Type	Dog Creek	<u>Wax</u>	Moutardier	Totals
Vehicle				
Car	49.7	40.6	51.5	47.60
Truck	31.8	42.8	18.7	29.14
Van	14.3	14.9	19.1	16.78
Motorhome	12.5	12.0	16.2	14.07
Other	0.2	0.9	0.8	0.73
Camping equipment				
Tent	56.6	57.7	58.8	58.12
Pop-up trailer	2.2	5.6	6.6	5.60
Pickup camper	28.0	14.7	22.8	21.33
Travel trailer	2.2	6.2	6.3	5.62
No camping equipment	0.0	6.2	0.0	1.78
Recreational equipment				
Powerboat	33.3	48.2	44.9	43.30
Sailboat	0.0	0.2	0.1	0.09
Other boat	0.1	1.1	0.4	0.54
Bicvcle	0.1	0.0	0.0	0.02
Motorcycle	0.1	0.0	0.0	0.02
Off-road vehicle (ORV)	0.1	0.0	0.0	0.02
Other	1.0	0.5	0.2	0.47

Table Al7

Lake Oahe User Characteristics

Characteristic	Downstream South	Downstream North	Indian Creek	Indian Memorial	Totals
Recreation days	4,226	20,608	10,121	964	35,919
Mean length of stay, nights	1.71	2.11	2.45	2,23	2.14
Mean number in group	3.12	2.97	2.98	2.87	2.99
Percent prior visits	42.90	25.50	56.80	65.60	36.28
Percent primary destination	58.80	28.00	59.60	73.40	40.84
Percent Golden Passports	28.60	50.30	40.40	44.80	33.01
Number of camping permits	1,090	4,831	1,956	209	8,086
Number of camping groups	828	3,579	1,396	154	5,957

Table Alb

Lake Oahe Vehicle and Equipment Type

Percent of Camping Parties

Vehicle and Equipment	Downstream	Downstream	Indian	Indian	
Type	South	North	Creek	Memorial	Totals
Vehicle					
Car	30.	22.8	16.8	15.0	22.07
Fruck	Š-4.4	48.3	45.4	52.4	46.07
Van	14.3	10.2	9.8	10.5	10.59
Motorhome	<u>1 4 . 7</u>	30.4	35.7	29.4	31.00
Other		(1)	.'.5	1.3	1.01
Camping equipment					
Tent	3n.1	20.0	16.1	13.3	21.03
Pop-up trailer	4.4	8.3	4.7	1.3	7.41
hickup camper	20.1	Ib.b	21.8	33.3	20.01
Travel trailer	14.2	22.8	19.9	21.3	20.85
No camping equipment	(),4	0.4	7.1	5.3	2.25
Recreational equipment					
Powerhoat	24.9	41.0	57.0	57.1	42.94
Sailboat	0.1	0.1	0.1	0.6	0.10
Other boat	0.5	0.1	0.3	0.6	0.20
Bicycle	().()	2.7	1.3	2.6	2.01
Motorcycle	1.3	0.9	0.6	0.0	0.86
Off-road vehicle (ORV)	0.0	0.0	0.0	0.6	0.02
Other	0.5	0.2	25.8	18.8	6.70

Table A19

Lake Ouachita User Characteristics

Characteristic	Denby Point	Tompkins Bend	Joplin	Crystal Springs	Brady Mountain	Cedar Fourche	Totals
Recreation days	16,901	9,989	10,026	11,345	20,164	9	68,434
Mean length of stay, nights	2.74	3.29	2.72	2.07	2.11	3.0	2.46
Mean number in group	3.55	3.76	3.76	3.82	3.81	3.0	3.74
Percent prior visits	23.60	76.10	82.70	23.30	6.70	0.0	31.31
Percent primary destination	26.80	91.50	84.80	11.30	6.40	0.0	31.66
Percent Golden Passports	35.00	20.40	10.00	9.10	9.20	0.0	14.43
Number of camping permits	1,995	1,173	1,300	1,570	2,582	1	8,621
Number of camping groups	1,793	791	994	1,389	2,502	1	7,470

Table A20

Lake Ouachita Vehicle and Equipment Type

Percent of Camping Parties

Vehicle and Equipment Type	Denby Point	Tompkins Bend	Joplin	Crystal Springs	Brady Mountain	Cedar Fourche	Total
	TOTHE		SOPIII	Springs	Hountain	rourche	Iotai
Vehicle							
Car	35.0	38.8	45.6	52.1	44.3	0.0	43.21
Truck	61.9	59.2	52.1	49.7	44.3	100.0	52.07
Van	10.0	12.1	12.1	11.8	12.9	0.0	11.83
Motorhome	18.7	5.9	4.8	3.6	5.6	0.0	8.19
Other	0.2	1.7	2.3	0.7	1.2	0.0	1.06
Camping equipment							
Tent	31.4	61.4	77.3	77.0	72.1	0.0	62.82
Pop-up trailer	12.6	14.4	12.0	10.6	13.4	0.0	12.61
Pickup camper	8.2	6.1	3.8	4.4	6.4	0.0	6.11
Travel trailer	38.1	20.7	6.7	8.5	9.3	100.0	16.92
No camping equipment	0.1	0.9	0.3	0.4	0.2	0.0	0.28
Recreational equipment							
Powerboat	47.9	62.1	49.4	38.5	26.9	0.0	40.82
Sailboat	0.0	0.4	1.3	0.2	0.9	0.0	0.55
Other boat	1.4	0.9	0.5	1.9	0.2	0.0	0.91
Bicycle	6.9	12.5	1.5	4.2	0.5	0.0	4.14
Motorcycle	0.9	1.5	1.4	1.9	0.1	0.0	0.94
Off-road vehicle (ORV)	0.1	0.0	0.2	0.8	0.0	0.0	0.19
Other	0.2	1.3	1.5	1.2	0.2	0.0	0.66

Table A21
R. S. Kerr Lake User Characteristics

Channel and a standard	Applegate	Short Mountain	Cowlington	Gore	Sallisaw	m 1
Characteristic	Cove	Cove	<u>Point</u>	Landing	Creek	Totals
Recreation days	7,310	2,105	5,368	1,514	398	16,695
Mean length of stay, nights	3.12	1.63	3.18	1.92	1.38	2.70
Mean number in group	2.93	4.02	3.27	2.98	4.27	3.24
Percent prior visits	70.60	73.70	76.10	80.40	78.10	74.17
Percent primary destination	80.10	91.20	88.70	91.30	90.40	85.98
Percent Golden Passports	44.90	10.90	57.50	13.60	2.70	26.88
Number of camping permits	1,331	408	972	360	80	3,151
Number of camping groups	899	331	637	286	73	2,226

Table A22

R. S. Kerr Vehicle and Equipment Type

Percent of Camping Parties

		Short				
Vehicle and Equipment Type	Applegate <u>Cove</u>	Mountain Cove	Cowlington Point	Gore Landing	Sallisaw Creek	Totals
Vehicle						
Car	23.8	26.6	26.2	18.0	37.5	24.61
Truck	68.7	73.7	71.4	73.6	65.3	70.75
Van	5.1	8.0	7.6	3.5	8.3	6.14
Motorhome	18.7	2.5	10.6	16.9	13.9	13.60
Other	0.8	3.7	0.2	0.0	0.0	0.91
Camping equipment						
Tent	18.7	51.2	25.2	34.2	59.0	28.39
Pop-up trailer	2.8	4.3	4.2	2.6	3.3	3.41
Pickup camper	10.3	19.1	14.0	30.8	16.4	15.40
Travel trailer	51.9	25.4	48.5	20.7	11.5	41.97
No camping equipment	0.1	1.3	1.0	0.0	0.0	0.53
Recreational equipment						
Powerboat	34.9	26.6	39.6	72.7	50.7	40.39
Sailboat	0.7	0.3	0.0	0.0	0.0	0.31
Other boat	0.1	0.0	0.6	0.7	0.0	0.31
Bicycle	1.4	1.2	1.1	0.7	0.0	1.17
Motorcycle	0.1	0.3	0.8	0.0	1.4	0.36
Off-road vehicle (ORV)	0.0	0.0	0.3	0.0	0.0	0.09
Other	1.4	14.2	4.2	1.0	0.0	2.56

Table A23
Lake Shelbyville User Characteristics

Characteristic	Opossum Creek	Coon Creek	Lone Point	Lithia Springs	Forrest W. Woods	Whitley Creek	Totals
Recreation days	5,933	54,869	5,533	42,081	28,208	8,273	144,897
Mean length of stay, nights	2.28	3.02	2.13	3.14	3.52	2.52	3.05
Mean number in group	3.83	3.48	5.45	3.78	3.55	4.06	3.70
Percent prior visits	62.50	65.00	61.10	69.80	80.20	82.20	70.08
Percent primary destination	83.60	91.70	90.30	92.50	95.50	96.60	92.47
Percent Golden Passports	10.40	17.90	1.90	23.20	42.90	9.10	17.51
Number of camping permits	876	6,786	521	5,458	3,609	1,155	18,405
Number of camping groups	750	5,245	473	4,140	2,705	842	14,155

Table A24

Lake Shelbyville Vehicle and Equipment Type

Percent of Camping Parties

Vehicle and Equipment Type	Opossum Creek	Coon Creek	Lone Point	Lithia Springs	Forrest W. Woods	Whitley Creek	Totals
Vehicle						· · ·	
Car	52.8	45.8	51.9	42.5	38.5	49.3	44.24
Truck	32.3	38.2	29.0	31.8	46.4	36.7	37.27
Van	16.9	13.9	24.5	15.6	12.0	15.8	14.65
Motorhome	4.9	12.5	9.7	17.1	20.6	4.9	14.39
Other	2.3	0.6	0.9	0.4	0.5	0.2	0.63
Camping equipment							
Tent	77.3	45.2	72.7	39.3	19.1	69.6	42.54
Pop-up trailer	5.2	14.2	9.5	13.5	9.8	8.3	12.14
Pickup camper	8.2	9.2	9.5	10.8	10.4	8.3	9.77
Travel trailer	3.4	17.2	6.3	18.2	37.7	9.9	19.91
No camping equipment	4.4	5.8	2.9	5.1	5.5	4.4	5.27
Recreational equipment							
Powerboat	42.0	41.2	48.0	32.9	47.7	47.0	40.64
Sailboat	0.5	0.2	1.5	0.1	0.3	0.8	0.32
Other boat	0.5	0.5	0.4	0.9	0.1	0.1	0.53
Bicycle	2.5	10.9	1.7	4.3	22.6	3.0	9.97
Motorcycle	0.5	1.1	1.7	0.9	1.0	0.5	0.98
Off-road vehicle (ORV)	0.0	0.1	0.0	0.1	0.0	0.0	0.04
Other	0.1	5.9	4.2	10.0	2.1	0.6	5.69

Table A25
Shenango Lake User Characteristics

Characteristic	Shenango Rec Area	Totals
Recreation days	66,192	66,192
Mean length of stay, nights	3.41	3.41
Mean number in group	3.71	3.71
Percent prior visits	48.0	48.0
Percent primary destination	60.2	60.2
Percent Golden Passports	49.3	49.3
Number of camping permits	7,618	7,618
Number of camping groups	5,102	5,102

Table A26

Shenango Lake Vehicle and Equipment Type

Percent of Camping Parties

Vehicle and Equipment	Shenango	
Type	Rec Area	Totals
Vehicle		
Car	59.3	59.3
Truck	36.5	36.5
Van	10.8	10.8
Motorhome	14.6	14.6
Other	0.2	0.2
Camping equipment		
Tent	34.4	34.4
Pop-up trailer	12.9	12.9
Pickup camper	8.9	8.9
Travel trailer	26.9	26.9
No camping equipment	3.5	3.5
Recreational equipment		
Powerboat	29.3	29.3
Sailboat	0.3	0.3
Other boat	5.3	5.3
Bicycle	34.6	34.6
Motorcycle	0.8	0.8
Off-road vehicle (ORV)	0.2	0.2
Other	0.8	0.8

Table A27
Somerville Lake User Characteristics

Characteristic	Big Creek	Rocky Creek	Yegua Creek	<u>Overlook</u>	Totals
Recreation days	9,156	62,083	47,992	16,402	135,633
Mean length of stay, nights	1.61	2.14	2.32	1.24	2.00
Mean number in group	3.52	4.03	3.66	4.23	3.90
Percent prior visits	50.10	60.00	68.20	37.50	58.00
Percent primary destination	52.70	64.40	72.60	35.80	61.23
Percent Golden Passports	3.10	15.50	34.00	5.10	16.95
Number of camping permits	1,807	9,055	7,126	3,476	21,464
Number of camping groups	1,652	7,978	6,412	3,316	19,358

Table A28

Somerville Lake Vehicle and Equipment Type

Percent of Camping Parties

Vehicle and Equipment Type	Big Creek	Rocky Creek	Yegua Creek	<u>Overlook</u>	Totals
Vehicle					
Car	45.8	33.7	32.7	56.0	38.25
Truck	48.4	55.5	57.6	39.8	52.86
Van	10.3	11.2	11.5	10.0	11.02
Motorhome	2.9	7.4	13.5	2.5	8.18
Other	0.7	4.3	0.3	0.3	1.98
Camping equipment					
Tent	77.1	57.0	34.0	27.7	45.30
Pop-up trailer	5.3	8.1	7.5	1.9	6.55
Pickup camper	7.7	5.0	5.5	3.9	5.18
Travel trailer	4.8	19.3	34.0	2.2	20.04
No camping equipment	4.4	5.2	8.1	64.6	17.09
Recreational equipment					
Powerboat	22.0	40.0	39.8	19.1	34.81
Sailboat	1.9	1.5	2.3	1.7	1.82
Other boat	0.7	0.3	1.0	1.4	0.74
Bicycle	0.5	0.7	6.6	0.4	2.59
Motorcycle	0.1	0.6	1.7	0.3	0.88
Off-road vehicle (ORV)	0.0	0.1	1.2	0.1	0.46
Other	0.2	0.7	0.5	0.3	0.50

Table A29
West Point Lake User Characteristics

Characteristic	R. Shaefer Heard	Holiday Park	Stateline Park	Amity Park	Totals
Recreation days	13,256	17,373	9,295	22,507	62,431
Mean length of stay, nights	2.94	2.70	2.71	3.33	2.95
Mean number in group	3.30	3.02	3.55	3.35	3.26
Percent prior visits	78.40	73.40	77.20	87.60	79.24
Percent primary destination	80.50	78.00	78.90	93.20	83.19
Percent Golden Passports	52.70	46.10	18.70	60.60	36.19
Number of camping permits	1,804	2,939	1,377	2,756	8,876
Number of camping groups	1,311	2,323	1,135	2,043	6,812

Table A30

West Point Lake Vehicle and Equipment Type

Percent of Camping Parties

Vehicle and Equipment Type	R. Shaefer Heard	Holiday Park	Stateline Park	Amity Park	Totals
Vehicle					
Car	41.7	29.3	42.8	42.0	37.63
Truck	47.0	50.4	45.0	47.5	48.01
Van	13.8	13.0	13.7	11.6	12.85
Motorhome	20.6	26.9	21.0	27.2	24.86
Other	0.3	0.2	0.1	0.9	0.43
Camping equipment					
Tent	39.1	30.5	46.9	25.9	33.06
Pop-up trailer	8.8	7.6	4.6	7.6	7.43
Pickup camper	6.5	12.3	15.4	11.7	11.43
Travel trailer	28.6	20.9	16.5	30.2	24.85
No camping equipment	0.4	0.0	0.0	0.1	0.10
Recreational equipment					
Powerboat	41.8	62.6	47.9	51.7	52.91
Sailboat	0.5	0.1	0.4	0.2	0.28
Other boat	0.2	0.3	1.0	0.1	0.35
Bicycle	2.7	1.2	0.1	9.1	3.67
Motorcycle	0.5	0.5	0.5	1.3	0.75
Off-road vehicle (ORV)	0.0	0.1	0.0	0.0	0.03
Other	0.8	0.0	0.0	0.6	0.34

Table A31
Mississippi Pool 16 User Characteristics

	Clark's	Shady	
Characteristic	Ferry	Creek	Totals
Recreation days	6,314	4,065	10,379
Mean length of			
stay, nights	2.81	1.81	2.38
Mean number in			
group	2.49	3.04	2.72
Percent prior			
visits	56.30	73.30	63.63
Percent primary			
destination	83.40	68.80	77.08
Percent Golden			
Passports	60.50	30.40	42.02
Number of camping			
permits	1,145	728	1,873
Number of camping			
groups	940	718	1,658

Table A32

Mississippi Pool 16 Vehicle and Equipment Type

Percent of Camping Parties

Vehicle and Equipment	Clark's	Shady	
Type	Ferry	Creek	Totals
Vehicle			
Car	23.3	30.8	26.59
Truck	44.2	41.5	43.05
Van	9.5	13.9	11.40
Motorhome	32.0	25.1	29.02
Other	0.0	0.0	0.00
Camping equipment			
Tent	6.2	23.9	13.67
Pop-up trailer	4.9	8.8	6.49
Pickup camper	5.0	9.4	6.87
Travel trailer	52.9	35.7	45.68
No camping equipment	0.2	0.0	0.13
Recreational equipment			
Powerboat	6.3	17.3	11.04
Sailboat	0.0	0.0	0.00
Other boat	0.0	0.0	0.00
Bicycle	3.9	0.6	2.47
Motorcycle	0.3	0.4	0.36
Off-road vehicle (ORV)	0.1	0.0	0.06
Other	0.0	0.1	0.06

APPENDIX B: COMPARISON OF 1981-1985 CAMPGROUND RECEIPT STUDY (CRS) DATA

Table Bl
Use Characteristics for Entire CRS 1981-1985
Percent of Camping Parties

Characteristic	1981	1982	1983	1984	1985
Prior visits to project	80.0	71.4	64.0	61.2	57.6
Project as primary destination	89.6	79.5	76.4	72.9	67.6
Golden Age or Access Passports	16.7	18.7	25.1	21.7	21.1

Table B2

<u>Distribution of Vehicle Types for Entire CRS</u>

1981-1985, Percent of Camping Parties

Vehicle Type	1981	1982	1983	1984	1985
Car	37.2	41.6	42.1	38.4	39.6
Truck	40.6	44.6	46.7	47.7	46.7
Van	9.5	10.9	11.1	10.8	11.3
Motorhome	12.7	13.3	12.6	13.6	13.9
Other	1.7	2.2	1.9	1.7	1.5

Table B3

Distribution of Camping Equipment and Powerboats for
Entire CRS, 1981-1985, Percent of Camping Parties

Equipment/Boat	1981	1982	1983	1984	1985
Tent	33.8	40.3	41.3	41.1	40.3
Pop-Up trailer	9.9	9.4	8.8	8.7	10.1
Pickup camper	12.2	12.9	11.2	10.0	9.2
Travel trailer	25.4	23.4	21.6	21.5	21.3
No camping equipment		4.4	10.4	9.0	9.6
Powerboat	30.4	31.2	35.6	32.4	30.5

Ę